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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,687

09/17/2003

David M. Skinlo

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08/31/2007

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EXAMINER

HODGE, ROBERT W

ART UNIT

PAPER NUMBER

1745

MAIL DATE

DELIVERY MODE

08/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,687

Applicant(s)

SKINLO, DAVID M.

Examiner

Robert Hodge

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-45 and 67-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-45, 67-69, 83, 84 and 86 is/are rejected.
- 7) ☒ Claim(s) 70-82 and 85 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/26/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/26/07 have been fully considered but they are not persuasive. Applicants state that amended claim 43 overcomes the prior art made of record in rejecting the claim. This is not found persuasive for at least the reason that claim 43 contains new matter and is also indefinite, which will be explained in the below 112 rejections. Furthermore because of the indefiniteness of claim 43 it is the position of the Examiner that the Teramoto and Kitoh reference still read on the claims as recited and therefore the rejections will be maintained. For clarification it is quite clear that the first point in Kitoh is located "adjacent to the case past a center point of the second cap". The breadth of said recitation allows for the first location to be anywhere within the cell as long as it adjacent to the case, and since the case is located at the exterior of the center point the location would be past a center point of the cap, such as located near indicator 5 of figure 4 of the Kitoh reference.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 6/26/07 has been considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-45 and 67-86 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 43 recites the negative limitation of "the tab is not connected to the second end cap from the first location to the second location". The Examiner cannot find support for said recitation anywhere in the instant specification, nor in the drawings. As seen in figure 24 the flexible tab is in physical contact with the end cap pretty much along the whole bottom surface of the end cap wherever the tab is present. Therefore the negative recitation as discussed above reciting that the tab is not connected to the second end cap from the first to second location is new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43-45 and 67-86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43 recites two locations where a flexible conductive tab is located within the battery cell, the first location being situated adjacent to the case past a center point of the cap and a second location located somewhere else on the cap but not defined and wherein the center point is located somewhere in between the first and second

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locations. The claim then further recites that the tab is not connected to the second cap from the first to the second location. It is unclear where exactly the second location is supposed to be situated. Applicants argue that the prior art does not teach this limitation but it is impossible to determine from the claim language where the second location is going to be located. Therefore as long as the prior art teaches connecting the tab anywhere on the cap it will read on the second location as recited.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 43-45, 67-69, 83 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teramoto et al. (US 5,501,916) in view of Kito et al. (US 6,399,242 B2).

With respect to claims 43, 45 and 86 Teramoto et al. teach a lithium battery comprising a battery can (45) sealed by a first battery lid (47) and a second battery lid (47), an electrically conductive terminal core (48) extending through the first battery lid and electrically insulated from the case by gasket (46), an electrode assembly disposed within the can, wherein the positive electrode is in electrical communication with the core while the negative electrode is not in electrical communication with the core. See Figure 9, Example 2.

However, Teramoto et al. do not teach a conductive tab extending from a location adjacent to the case to a location where the tab is electrically connected to the

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second battery lid. Kito et al. teach a lithium battery comprising a battery case, a first battery lid (16), a second battery lid (17), wherein flexible conductive tabs are disposed past a center point of the second battery lid and are electrically connected to the second battery lid. As a result, the internal resistance is reduced and current extraction from the internal electrode become easier. See Figure 4 and Column 5, Lines 20-43. Kito et al. further teach that the tab is not connected to the second battery lid continuously over a distance extending from the first location to the second location. See Figure 4.

Therefore, it would have been obvious to one of ordinary skill in the art to use flexible conductive tabs to electrically connect the negative electrode to the second battery lid such that the tab is not continuously connected over the entire inside surface of the cap in the battery of Teramoto et al., because Kito et al. teach such electrical connection can reduce internal resistance and facilitate current extraction from the electrode.

With respect to claim 44, Teramoto et al. teach the case does not have a fill hole. See Figure 9.

With respect to claim 67 Kito et al. teach the distance of the connection is shorter than the radius of the second battery lid. See Figure 4.

With respect to claims 68 and 69 Teramoto et al. teach the electrodes spirally wound on the terminal core. The terminal core further comprises a mandrel (49,50) around the core. See Figure 9.

With respect to claim 83, Teramoto et al. teach the positive electrode is in electrical commutation with the terminal core via a weld (52). See Example 2.

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Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teramoto et al. (US 5,501,916) and Kito et al. (US 6,399,242 B2) as applied to claims 43-45, 67-69, 83 and 86 above, and further in view of Cogan (US 5,755,759).

Teramoto et al. and Kito et al. as discussed above are incorporated herein. However, Teramoto et al. and Kito et al. do not disclose the use of PtIr alloy as the pin. Cogan teaches a biomedical device wherein the wire electrode is made of PtIr alloy because it can record or stimulate physiological function. See Column 3, Lines 43-56. Therefore, it would have been obvious to one of ordinary skill in the art to use PtIr alloy as the pin onto the battery of Teramoto and Kito, because Cogan teaches the alloy can be used in implantable medical device.

Allowable Subject Matter

Claims 70-82 and 85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For reasons made of record in the office action dated 3/7/07.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RWH


JONATHAN CREPEAU
PRIMARY EXAMINER